MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/2023 (TERM ID 2220)

PIM0245 – INTRODUCTION TO MULTIMEDIA TECHNOLOGY

(Foundation in Information Technology)

10 JULY 2023
9.00 a.m. – 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **TWO** pages (excluding the cover page).
2. Answer **ALL** questions.
3. Write your answers in the Answer Booklet provided.

Instructions: Answer **ALL** questions. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

a. Animation serves a variety of purposes in a wide range of industries, including film, television, marketing, gaming, and education. It also plays a significant part in the media and entertainment sectors.

i. How do 2D and 3D animations differ from one another?

(2 marks)

ii. Briefly describe the kinematics, inverse kinematics and morphing techniques used in computer animation.

(3 marks)

b. The MIDI (Musical Instrument Digital Interface) standard was created for use with digital synthesisers to record and play back music. Briefly explain how a MIDI synthesiser works.

(2 marks)

c. Digital audio is a technology that reproduces sound using digital signals. It involves transmission, storage, and analog-to-digital and digital-to-analog conversion. List and describe **TWO (2)** characteristics of audio files.

(3 marks)

QUESTION 2 [10 Marks]

a. A multimedia programme is evaluated to see if it achieves the goals stated and to identify any improvements that are needed to make the programme effective for the intended audience. List and describe the **FOUR (4)** issues that users should consider while evaluating a multimedia product.

(6 marks)

b. Yana has been tasked with developing an interactive website. As soon as she starts the multimedia project, she feels overwhelmed. There are numerous things to think about. Give Yana **FOUR (4)** tips to make sure her production work goes smoothly.

(4 marks)

QUESTION 3 [10 Marks]

Jasleen wants to develop an interactive encyclopaedia. The best interface designs should be simple, understandable, and clear so that users of all levels may use them without difficulty.

a. Explain **THREE (3)** interface components that Jasleen should pay attention to while designing the best interface for her product.

(3 marks)

Continued ...

b. Text length affects how comfortable it is for the eye. Which font is suitable to be used for computer displays? Give a reason to support your answer.

(2 marks)

c. Give Jasleen **FIVE (5)** tips for interface design.

(5 marks)

QUESTION 4 [10 Marks]

In August 2023, Mukhriz and his co-workers will represent their company at the Retail Solution Expo in Kuala Lumpur. He must produce digital marketing materials to be used during the event. He plans to incorporate product pictures as well as a short video that describes the products in the digital marketing materials.

a. Which **TWO (2)** suitable graphic file formats can Mukhriz use? Give **TWO (2)** reasons for each file format you choose.

(5 marks)

b. A 3-minute, 24-bit colour marketing video was produced by Mukhriz using a 640 by 480 frame size. Calculate the file size of the video. Show the calculation process in detail and write the answer in MB.

(5 marks)

QUESTION 5 [10 marks]

A client asked Balqis to make a business presentation for them. The product will be created using cutting-edge multimedia technologies with the intention of disseminating information in an engaging manner.

a. Describe the first stage Balqis must do before starting to incorporate her ideas into the final product.

(4 marks)

b. Give **THREE (3)** steps Balqis must take in the first stage answered in **Question 5(a)**.

(3 marks)

c. Balqis designed a graphic that will be used in the product. How much memory will a JPEG image with a 624 by 240 resolution use? Show the calculation process in detail and write the answer in KB.

(3 marks)

End of Paper